

Before the
FEDERAL COMMUNICATIONS COMMISSION
 Washington, D.C. 20554

In the Matter of)

Amendment of Parts 2 and 25 of the)
 Commission's Rules to Permit Operation)
 of NGSO FSS Systems Co-Frequency)
 with GSO and Terrestrial Systems in the)
 Ku-band Frequency Range)

and)

Amendment of the Commission's Rules)
 to Authorize Subsidiary Terrestrial Use)
 of the 12.2-12.7 GHz Band by Direct)
 Broadcast Satellite Licensees and Their)
 Affiliates)

ET Docket No. 98-206
 RM-9147
 RM-9245

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**COMMENTS OF HOME BOX OFFICE
 AND TURNER BROADCASTING SYSTEM, INC.**

Home Box Office ("HBO") and Turner Broadcasting System, Inc. ("TBS") by their attorneys, hereby submit their comments in response to the Notice of Proposed Rulemaking ("Notice"), released in the above-captioned proceeding on November 24, 1998.^{1/} In its Notice, the Commission proposes to allow non-geostationary satellite orbit ("NGSO") fixed-satellite service ("FSS") operations in certain segments of the Ku-band that currently are used extensively by geostationary satellite orbit ("GSO") FSS and direct broadcast satellite ("DBS") systems.^{2/} The Notice tentatively suggests that the Commission might adopt the provisional spectrum sharing criteria developed at the 1997 International Telecommunication Union ("ITU") World

^{1/} FCC 98-310, released November 24, 1998.

^{2/} Notice at ¶ 1.

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Radiocommunication Conference (“WRC-97”).^{3/} However, the Commission asks parties to analyze whether the WRC-97 spectrum sharing criteria are adequate to protect existing GSO FSS and DBS services in the Ku-band from unacceptable interference. In a related matter, the Notice seeks comment on the petition filed by Northpoint Technology (“Northpoint”) to permit terrestrial use of the 12.2-12.7 GHz band for the retransmission of local television broadcast signals and the provision of one-way data services by DBS service operators and their affiliates.^{4/}

As detailed below, HBO/TBS believe that the provisional spectrum sharing criteria established at WRC-97 fail to protect existing GSO services in the Ku-band from unacceptable interference from NGSO FSS operations. In addition, it is premature for the Commission to adopt the criteria established at WRC-97, or any other sharing measures, because the WRC-97 criteria currently are under review by ITU Study Groups and are subject to change at WRC-2000. In the event the Commission determines that it must adopt sharing criteria prior to the conclusion of WRC-2000, it should implement the proposals presented by the United States at the January 1999 meeting of the ITU Joint Task Group (“JTG”) 4-9-11 in Long Beach, California.

Concerning the Northpoint Petition, HBO/TBS support the Commission’s tentative conclusion that Northpoint has failed to demonstrate that its terrestrial technology would not cause harmful interference to DBS.^{5/} Therefore, the Commission should deny Northpoint’s requested use of the 12.2-12.7 GHz band.

^{3/} See Final Acts of the 1997 World Radiocommunication Conference (“Final Acts of WRC-97”); Article S21, Article S22, Resolution 130, Resolution 131, Resolution 538 (Geneva, 1997).

^{4/} Northpoint Technology Petition for Rulemaking, filed March 6, 1998 (“Northpoint Petition”). See, Notice at ¶ 8.

^{5/} Notice at ¶ 98.

I. STATEMENT OF INTEREST

HBO is a leading supplier of pay television programming in the United States, and TBS is a leading basic cable network provider in the United States. HBO distributes multiple feeds of two premium programming services, HBO and Cinemax. TBS distributes the following basic cable networks in the United States: CNN, Headline News, TNT, TBS Superstation, Cartoon Network, Turner Classic Movies, CNNfn, CNN International, CNN/SI and CNN en Espanol. The HBO/TBS services are distributed by means of a wide range of multichannel video distribution technologies, including cable television systems, SMATV systems, wireless cable systems, telephone company facilities, C-band satellites ("TVRO"), medium power Ku-band FSS satellites and high power DBS systems. The particular distribution systems used to transmit the HBO/TBS services that are implicated by the Notice are the medium power FSS direct-to-home service operated by PRIMESTAR, Inc. and DBS services operated by DirecTV, United States Satellite Broadcasting Co., Inc. ("USSB") and EchoStar Communications, Inc. ("EchoStar").^{6/}

Although HBO/TBS do not lease capacity on or operate the satellite systems used by DirecTV, USSB, EchoStar and PRIMESTAR, the Commission's decisions on the issues set forth in the Notice could affect HBO/TBS adversely. If the Commission adopts NGSO/GSO spectrum sharing criteria that do not adequately protect GSO Ku-band systems from interference, or if the Commission permits deployment of the Northpoint technology that interferes with DBS operations, the quality of the signals of HBO's and TBS' services distributed over Ku-band GSO systems could

^{6/} USSB, EchoStar and PRIMESTAR receive and distribute several HBO and Cinemax feeds. USSB currently distributes seven HBO feeds and three Cinemax feeds. EchoStar distributes six HBO feeds and three Cinemax Feeds. PRIMESTAR distributes four HBO feeds and two Cinemax feeds. All of the TBS services except CNN en Espanol are distributed in some combination by PRIMESTAR and the high-power DBS operators. Through these satellite distributors, HBO/TBS have access to a potential of almost nine million customers.

be degraded. The viewers of HBO/TBS' services expect excellent signal quality. Any deterioration in signal quality resulting from such interference, therefore, could have a negative impact on HBO/TBS' viewer satisfaction levels which would lessen the number of HBO subscribers and TBS viewers and, in turn, HBO/TBS' revenues.

II. THE COMMISSION SHOULD DECLINE TO ADOPT THE WRC-97 KU-BAND SPECTRUM SHARING CRITERIA BECAUSE THE CRITERIA WOULD DEGRADE TRANSMISSION QUALITY FOR EXISTING GSO OPERATORS IN THE KU-BAND

The Notice suggests that NGSO FSS service downlink operations could share the 11.7-12.2 GHz band with incumbent GSO FSS downlinks and the 12.2-12.7 GHz band with incumbent DBS downlinks. In reaching this conclusion, with respect to the 11.7-12.2 GHz band, the Commission seeks comment "on the adequacy of the WRC-97 epfd limits ... for NGSO operations to protect incumbent GSO FSS operations."^{7/} Later in the Notice, in discussing NGSO sharing with DBS downlink frequencies (12.2-12.7 GHz), the Commission declares that it is "not convinced, based on the record to date, that the provisional epfd limits adopted by WRC-97 are adequate to protect the 45 cm dishes that are used in the U.S."^{8/} Nevertheless, the Commission indicated its belief that if alternatives to the WRC-97 limits are not developed, "these provisional limits will be adopted as the international sharing criteria at WRC-2000."^{9/}

There is no basis for the Commission to adopt the provisional WRC-97 spectrum sharing criteria at this time. The WRC-97 limits are not suitable for immediate adoption because the Notice explicitly recognizes that the record supporting the WRC-97 sharing criteria is incomplete.

^{7/} Notice at ¶ 54.

^{8/} Notice at ¶ 59.

^{9/} Id.

Because the technical studies justifying the WRC-97 NGSO action had not been fully studied in the usual ITU Radiocommunication Sector ("ITU-R") study group process, these efd and apfd limits were deemed provisional until they could be analyzed by the relevant ITU-R study groups and reviewed at WRC-2000.^{10/}

As the Commission is well aware, it is the United States' position before the ITU JTG 4-9-11 that the WRC-97 provisional criteria are insufficient to protect incumbent Ku-band GSO systems and, accordingly, that modified criteria should be adopted at WRC-2000. Other administrations and entities (i.e., Canada, Russia and INTELSAT) also put forward criteria at the JTG 4-9-11 meeting in January that were more protective of GSO systems than the WRC-97 provisional limits. Only France proposed criteria at JTG 4-9-11 similar to the WRC-97 provisional limits. In the interest of administrative efficiency, the prudent course for the Commission would be to wait until the sharing criteria are finalized at WRC-2000 and then to adopt those criteria to the extent they are adequate to protect GSO systems serving the United States.

Even if the Commission were to determine that it is appropriate to consider sharing criteria prior to WRC-2000, the provisional WRC-97 limits would not be suitable for adoption in the United States. It has been the United States position before JTG 4-9-11 that the provisional WRC-97 limits are unacceptable, and the United States and others have presented numerous papers to JTG 4-9-11 proposing alternative sharing criteria. If the Commission adopts, in the near future, any sharing criteria for domestic application, those criteria should be based on adequate protection of existing services in the Ku-band as outlined in the United States papers.

^{10/} Notice at ¶ 5 (emphasis added).

III. THE COMMISSION SHOULD DENY THE NORTHPOINT PETITION

Northpoint requests that the Commission allow it to use the 12.2-12.7 GHz band, on a secondary basis, to provide retransmission of the signals of local television stations and of one-way broadband data signals to DBS receivers.^{11/} Northpoint's belief that it can provide such a service without harmful interference is at best overly-optimistic. A careful review of Northpoint's Petition and the technical data underlying its proposal reveals that there are many technical problems with Northpoint's request. First, there are fundamental problems with Northpoint's experimental tests and filings as they relate to the reasonableness of Northpoint's service area.^{12/} Second, as observed by the Commission, the Northpoint Petition fails to adequately address the feasibility of the use of power control to protect DBS during rain fade conditions.^{13/}

Therefore, granting Northpoint's Petition would contravene the Commission's long-standing policy of protecting DBS operators from harmful interference from terrestrial operations.^{14/} At a minimum, the Commission should deny Northpoint's Petition until Northpoint can credibly demonstrate ways to minimize interference and answer the other open questions about its proposed service, including the ability of the service to co-exist with Ku-band NGSO systems.

^{11/} See Northpoint Petition at 1.

^{12/} See SkyBridge Comments at 1 and 6; Tempo Comments on Northpoint's Petition at 4-5.

^{13/} Notice at ¶ 94.

^{14/} See In the Matter of Inquiry into the Development of Regulatory Policy in Regard to Direct Broadcast, 86 F.C.C. 2d 719 ¶ 36 (1981) (proposing that "terrestrial licensees in the 12 GHz band ... be required to make whatever adjustments in technical parameters or assigned frequencies are necessary to prevent harmful interference."). Because the Commission required point-to-point terrestrial systems to make a probing inquiry to avoid interference, it should require no less for Northpoint's Petition which contemplates a signal that covers a 180° area and could result in disproportionately more interference than point-to-point fixed service operations.

IV. CONCLUSION

The provisional spectrum sharing criteria established at WRC-97 should not be implemented by the Commission because they fail to protect existing GSO services in the Ku-band from unacceptable interference from NGSO FSS operations. The Commission should defer a decision on sharing criteria until the conclusion of WRC-2000 or, if that is not feasible, the Commission should adhere to the alternate United States proposals presented at the January JTG 4-9-11 meeting in Long Beach, California. Finally, the Commission should affirm its tentative conclusion to deny Northpoint its requested use of the 12.2-12.7 GHz band because the company has failed to demonstrate that its technology would not cause harmful interference to DBS operations.

Respectfully submitted

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